
REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on April 23, 2003, and the references cited therewith.

§102 Rejection of the Claims

Claims 1-2, 4-5, 8, 10-11, 13-16, 18, and 20-21 were rejected under 35 USC § 102(b) as being anticipated by Larrick, Jr. et al. (U.S. Patent No. 6,026,125).

Larrick describes a system in which a sine wave oscillator (106 of Fig. 1) is gated by a mixer 108 and subsequently filtered to produce an ultrawideband transmitter. In contrast, the present invention as claimed employs a “pulse waveform generator circuit operable to generate an on-off pulse waveform”, as is shown for example as 102 in Fig. 1 of the present application. Because the pulses are different, the present invention differs in structure and function from the cited reference and is therefore believed to be patentably distinct.

Claims 1-2, 4, 8, 10-11, 13-15, 18, and 20-21 were also rejected under 35 USC § 102(e) as being anticipated by Low et al. (U.S. Patent No. 6,456,221).

Low describes a signal detection or receiver system for use with ultrawideband communications. It receives the ultrawideband signal through antenna 101, processes it via wave shaper 102, and processes it via nonlinear filter 105 which is biased by optional input 108.

Low nowhere suggests that it is capable of producing an ultrawideband pulse, or shows a pulse waveform generator circuit as is claimed in the pending claims. It further fails to receive a modulating signal and modulate such a pulse in response.

Because Low is very different in structure and function from the present invention, the pending claims are believed to be patentably distinct from Low and in condition for allowance.

Claims 1, 4-5, 8, 13-16, and 18 were rejected under 35 USC § 102(e) as being anticipated by Lysejko et al.(U.S. Patent No. 6,298,246).

Lysejko generates a fixed 455kHz sinusoidal signal via oscillator 900, filters it via filter 840 which is a notch filter with a fixed frequency of 455kHz and fixed bandwidth of 20kHz, switched by a switch 110 that is controlled by controller 830 to modulate the signal with data to be transmitted.

Lysejko is not an ultrawideband transmitter. Oscillator 900 does not produce “an on-off pulse waveform”, as is claimed in the pending claims, and so is different from the pulse waveform generator circuit of the pending claims. Because Lysejko lacks these elements of the pending claims, the pending claims are not anticipated by Lysejko, and are believed to be in condition for allowance.

Re-examination and allowance of the pending claims rejected is therefore respectfully requested.

§103 Rejection of the Claims

Claims 6-7 and 17 were rejected under 35 USC § 103(a) as being unpatentable over Larrick, Jr. et al. in view of Grunwell (U.S. Patent No. 5,499,392).

These claims are believed to be allowable for the reasons described above with respect to Larrick, and further as being dependent on an allowable base claim. Reexamination and allowance is therefore respectfully requested.

Allowable Subject Matter

Claims 3, 9, 12, 19, and 22 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Because the cited art does not anticipate the claims from which these claims depend, these claims are believed to be allowable as they presently stand as dependent on allowable base claims.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9581 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

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Date

July 18 '03

By

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O.Box 1450, Alexandria, VA 22313-1450, on this 18 day of July, 2003.

Gina M. Uphus

Name

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Signature